

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number  
**WO 2005/015601 A2**

- (51) International Patent Classification<sup>7</sup>: **H01J 61/00**
- (21) International Application Number: PCT/IB2004/051308
- (22) International Filing Date: 28 July 2004 (28.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
03102467.2 7 August 2003 (07.08.2003) EP
- (71) Applicant (for DE only): **PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-  
damm 94, 20099 Hamburg (DE).
- (71) Applicant (for all designated States except DE, US):  
**KONINKLIJKE PHILIPS ELECTRONICS N. V.**  
[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven  
(NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HILBIG, Rainer**  
[DE/DE]; c/o Philips Intellectual Property & Standards  
GmbH, Weissshausstr. 2, 52066 Aachen (DE). **SCHOLL,**  
**Robert, Peter** [DE/DE]; c/o Philips Intellectual Property  
& Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).
- (74) Agent: **MEYER, Michael**; Philips Intellectual Property &  
Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.
- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— without international search report and to be republished  
upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: **LOW-PRESSURE GAS DISCHARGE LAMP WITH ALKALINE EARTH CHALCOGENIDES AS ELECTRON  
EMITTER MATERIAL**

(57) Abstract: A description is given of a low-pressure gas discharge lamp equipped with a gas discharge vessel containing, as a buffer gas, an inert gas filling and an indium halogenide, thallium halogenide, gallium halogenide and/or copper halogenide, and with electrodes and means for generating and maintaining a low-pressure gas discharge, and which comprises one or more chalcogenides of alkaline earth metals as electron emitter material.

WO 2005/015601 A2